

Serial No. 10/091,490  
Amdt. Dated February 25, 2005  
Reply to Office Action of November 13, 2004

Docket No. HI-0073

### **REMARKS/ARGUMENTS**

Claims 1-21 are pending in this application. By this Amendment, the drawings and claims 1-18 are amended, and claims 19-21 are added. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

#### **I. Informalities**

The Office Action objects to the drawings, indicating Figures 1-2 should be designated by a legend. Figures 1-2 have been amended to include the legend "Related Art," consistent with the specification and Figure 3. Accordingly, the objection to the drawings should be withdrawn.

#### **II. Rejection Under 35 U.S.C. §112, Second Paragraph**

The Office Action rejects claims 1 and 6 under 35 U.S.C. §112, second paragraph. The amendments made to claims 1 and 6 are responsive to the Examiner's comments, and thus the rejection should be withdrawn.

**III. Rejection Under 35 U.S.C. §102(a)**

The Office Action rejects claims 1, 6-8, 10-13, and 17 under 35 U.S.C. §102(a) as being anticipated by U.S. Patent No. 6,526,215 to Hirai et al. (hereinafter "Hirai"). The rejection is respectfully traversed.

Independent claim 1 recites, *inter alia*, identifying the extracted text regions by a type selected from a plurality of types, allocating a different weight to each text region based upon the identification including at least said type, and generating a synthetic key frame by synthesizing each text region which has an importance measure of at least a certain value into a key frame. Hirai neither discloses nor suggests such features, or the claimed combination.

Hirai discloses a system for editing and managing video related information by organizing the displaying the video information in a hierarchical structure. Hirai discloses a nonlinear moving picture editing apparatus including a scene change point detector 201, a magnetic memory device 202, a monitor 203, a frame buffer 204, a main memory 205, an input device 206, a picture compressor 209, a picture size reducer 214, and a communication device 215, all connected to a CPU 211 via a bus 212. A VTR 207 is linked to a video interface 208 and an audio interface 210, which are also each connected to the CPU 211 via the bus 212.

As shown in Figure 11 of Hirai, a video signal is issued from a video tape loaded in the VTR 207, sending a frame unit of a moving picture through the video interface 208 and bus 212 to the scene change point detector 201. The scene change point detector 201 detects a scene

change point and a cut change point based on a color change between images, and stores a related frame number in the memory device 202. At the same time, a miniature image, or M-icon, which has been reduced in size by the picture size reducer 214, is stored in the memory device 202. Once stored in the memory device 202, the M-icon eliminates the decoding time associated with extracting a frame from an encoded moving picture and converting it to a video signal for reconstruction. The moving picture is encoded by the picture compressor 209 and stored in the memory device 202 for use in viewing a final product once the editing process is complete. Once the M-icon is stored in the memory device 202, the CPU 211 can read scene/cut information from the memory device 202 and display only the first frame of each scene each cut from the M-icon on the monitor 203.

Information associated with the M-icons is shown in Figures 4-5 and discussed at column 3, lines 5-67 of Hirai. Hirai discloses that in the prior art, comments, explanations, notes, and the like are separately input in a fixed format, with identical information columns are previously set for all source icons. However, these comments, remarks, etc. can also be added by the operator in a free format as shown in Figures 16-21 of Hirai. In order to input free format comments during the editing process, the operator accesses an information window 100 and enters comments (text) into a free format information column 103, and then applies a corresponding information item tag 101. However, these text entries are separate entries made by the operator, and Hirai does not disclose or suggest that these text entries are extracted from

a video stream, let alone from a news video stream containing a plurality of articles as recited in independent claim 1.

Hirai further discloses that the information item tags 101 are associated with a particular piece of video information, and stored in a hierarchical structure as shown in Figure 22 of Hirai. Then, once a given item information tag 101 is selected, an operator can set an associated level of importance by clicking the importance setting button 106. If an importance level is set to high, an appearance of the icon is changed so that it can be readily identified by the operator. Information can be sorted in order of importance by clicking the sort button 107, causing the information to be displayed from the most important at the upper end of the screen to the least important at the lower end of the screen (see column 21, lines 17-30 of Hirai).

Hirai's system allows an operator to enter information, or text, related to but separate from a piece of video information, including an associated importance level, during the video editing process, and to sort the pieces of video information by a discriminator of the operator's choosing. However, Hirai does not disclose or suggest that a weight is applied to the different pieces of video information in addition to the importance level, nor that a synthetic key frame is generated based on text regions with an importance measure of at least a certain value.

For at least these reasons, it is respectfully submitted that independent claim 1 is not anticipated by Hirai, and thus the rejection of independent claim 1 under 35 U.S.C. §102(a) over Hirai should be withdrawn. Dependent claims 6-8 and 10-12 are allowable at least for the

reasons set forth above with respect to independent claim 1, from which they depend, as well as for their added features.

Independent claim 13 recites, *inter alia*, extracting text regions from said video text of the news video stream. Independent claim 13 further recites, *inter alia*, allocating importance measure to the text regions, wherein the highest importance measure is allocated to a text region which is identified as an icon text region, and corresponding importance measures are allocated to text regions identified as general text regions, selecting text regions to be synthesized from the general text regions in order of importance, and synthesizing the icon text region and the selected general text regions into a key frame. As set forth above, Hirai neither discloses nor suggests such features. More specifically, Hirai neither discloses nor suggests that text regions, or any text, is extracted from a video stream. Further, Hirai discloses that importance levels may be set for the various pieces of video information at the operator's discretion, but does not disclose or suggest that the highest measure is allocated to an icon text region. Additionally, Hirai discloses that pieces of video information may be sorted by importance level, but neither discloses nor suggests selecting text regions to be synthesized in order of importance, nor synthesizing an icon text region and the selected general text regions into a key frame.

For at least these reasons, it is respectfully submitted that independent claim 13 is not anticipated by Hirai, and thus the rejection of independent claim 13 under 35 U.S.C. §102(a) over Hirai should be withdrawn. Dependent claim 17 is allowable at least for the reasons set

forth above with respect to independent claim 13, from which it depends, as well as for its added features.

### **III. Rejection Under 35 U.S.C. §103(a)**

The Office Action rejects claims 2-5, 9, 14-16, and 18 under 35 U.S.C. §103(a) as unpatentable over Hirai in view of U.S. Patent No. 5,821,945 to Yeo et al. (hereinafter "Yeo"). The rejection is respectfully traversed.

Dependent claims 2-5, 9, 14-16, and 18 are allowable over Hirai at least for the reasons set forth above with respect to independent claims 1 and 13, from which they respectively depend, as well as for their added features. Further, Yeo is merely cited to teach extracting icon text regions and general text regions from anchor and episode shots, and frames comprising an icon text region and at least one general text region. Thus, Yeo fails to overcome the deficiencies of Hirai. Accordingly, it is respectfully submitted that claims 2-5, 9, 14-16, and 18 are allowable over the applied combination, and thus the rejection of claims 2-5, 9, 14-16, and 18 under 35 U.S.C. §103(a) over Hirai and Yeo should be withdrawn.

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**IV. New Claims 19-21**

New claims 19-21 are added to the application. It is respectfully submitted that new claims 19-21 define over the applied prior art references and meet the requirements of 35 U.S.C. §112.

**V. Conclusion**

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Carl R. Wesolowski, at the telephone number listed below. Favorable consideration and prompt allowance are earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this,

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concurrent and future replies, including extension of time fees, to Deposit Account 16-

0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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**Amendments to the Drawings:**

The attached drawings include changes to Figs. 1 and 2. This sheet, which include Figs. 1 and 2, replaces the original sheet including Figs. 1 and 2. Figs. 1 and 2 have been amended to include the legend "Related Art."

Attachment: Replacement Sheet (1)  
Annotated Sheet Showing Changes (1)

Fig. 1  
RELATED ART

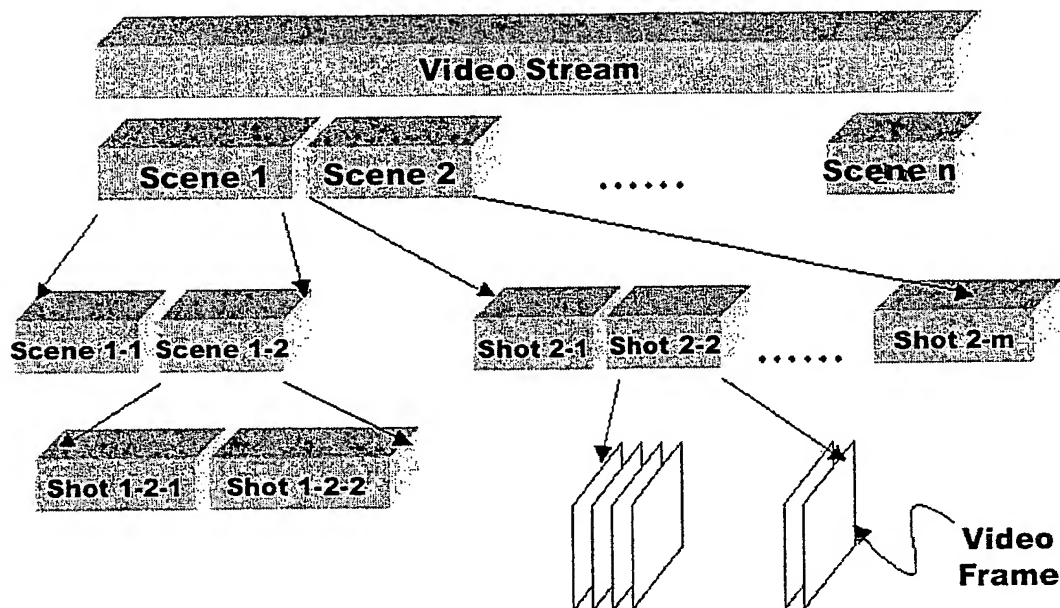


Fig. 2  
RELATED ART

